

Docket No. 1374.37465C10
Serial No. 10/774,588
October 17, 2005

AMENDMENTS TO THE CLAIMS:

The following listing of claims replaces all prior listings, and all prior versions, of claims in the application.

LISTING OF CLAIMS:

1. (Currently amended) A method for fabricating a semiconductor integrated circuit device, comprising the steps of:

(a) preparing moisture at a first temperature from oxygen and hydrogen by use of a catalyst;

(b) transferring the thus-prepared moisture into a vertical wafer heat treatment chamber of a batch processing vertical oxidation furnace through a gas introducing tube to form a wet oxidative atmosphere around a plurality of wafers inside the chamber, while keeping the moisture in a gaseous state; and

(c) performing thermal oxidation to a silicon member over a first major surface of each of the wafers in the wet oxidative atmosphere in the wafer heat treatment chamber by heating the wafers up to a second temperature higher than the first temperature,

wherein the wet oxidative atmosphere is introduced into the vertical wafer heat treatment chamber through the gas introducing tube disposed along a wall surface of the vertical wafer heat treatment chamber from its lower end to upper end, and the gas introducing tube has its outlet at the upper end of the vertical wafer heat treatment chamber so that the wet oxidative atmosphere flows from the upper end to the lower end in the vertical heat treatment chamber.

2. (Currently amended) A method for fabricating a semiconductor integrated circuit device according to Claim 9 4, wherein said thermal oxidation forms

Docket No. 1374.37465C10
Serial No. 10/774,588
October 17, 2005

an insulating film, and wherein said insulating film is a gate insulating film of an insulated gate field effect transistor.

3. (Currently amended) A method for fabricating a semiconductor integrated circuit device according to Claim 2, wherein thickness of the gate insulating film of said insulated gate field effect transistor is not more than 5 nm, and gate length thereof is not ~~not~~ more than 0.25 μm .

4. (Original) A method for fabricating a semiconductor integrated circuit device according to Claim 3, wherein the thickness of the gate insulating film of said insulated gate field effect transistor is not more than 3 nm.

5. (Original) A method for fabricating a semiconductor integrated circuit device according to Claim 1, wherein the first temperature is not more than 500°C, and the second temperature is not less than 800°C.

6. (Original) A method for fabricating a semiconductor integrated circuit device according to Claim 1, wherein the thermal oxidation is performed while providing the heat treatment chamber with said wet oxidative atmosphere.

7. (Original) A method for fabricating a semiconductor integrated circuit device according to Claim 1, further comprising the steps of:

(d) prior to step (b), introducing the wafers into the heat treatment chamber while providing the heat treatment chamber with nitrogen gas; and

Docket No. 1374.37465C10

Serial No. 10/774,588

October 17, 2005

(e) after step (c), drawing the wafers out of the heat treatment chamber while providing the heat treatment chamber with nitrogen gas.

8. (Original) A method for fabricating a semiconductor integrated circuit device according to Claim 6, further comprising the steps of:

(d) prior to step (b), introducing the wafers into the heat treatment chamber while providing the heat treatment chamber with nitrogen gas; and

(e) after step (c), drawing the wafers out of the heat treatment chamber while providing the heat treatment chamber with nitrogen gas.

9. (New) A method for fabricating a semiconductor integrated circuit device according to Claim 1, wherein the gas introducing tube is integrally formed with the wall surface of the vertical wafer heat treatment chamber on the wall surface of the vertical wafer heat treatment chamber.